Complete Summary

GUIDELINE TITLE

Primary biliary cirrhosis.

BIBLIOGRAPHIC SOURCE(S)

Lindor KD, Gershwin ME, Poupon R, Kaplan M, Bergasa NV, Heathcote EJ, American Association for Study of Liver Diseases. Primary biliary cirrhosis. Hepatology 2009 Jul;50(1):291-308. [222 references] PubMed

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Heathcote EJ. Management of primary biliary cirrhosis. The American Association for the Study of Liver Diseases practice guidelines. Hepatology 2000 Apr;31(4):1005-13. [105 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Primary biliary cirrhosis

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Prevention
Treatment

CLINICAL SPECIALTY

Family Practice
Gastroenterology
Internal Medicine

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To provide a data-supported approach to the management of primary biliary cirrhosis

TARGET POPULATION

Individuals with primary biliary cirrhosis

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

Liver biochemical tests (alkaline phosphatase level)

1. Alkaline phosphatase testing
2. Antimitochondrial antibody (AMA) testing
3. Liver biopsy and histopathology
4. Magnetic resonance imaging or endoscopy

Management/Treatment

1. Ursodeoxycholic acid (UDCA) therapy
2. Management of symptoms
    - Management of pruritus with bile acid sequestrants, rifampicin, oral opiate antagonists (naltrexone), and sertraline
    - Management of Â sicca syndrome: artificial tears, pilocarpine or cevimeline, and cyclosporine ophthalmic emulsion for dry eyes; saliva substitutes and pilocarpine or cevimeline for xerostomia and dysphagia; moisturizers for vaginal dryness
3. Management of osteopenia and osteoporosis (calcium with vitamin D and alendronate)

MAJOR OUTCOMES CONSIDERED

- Sensitivity and specificity of diagnostic tests
- Prevalence of clinical manifestations and complications of primary biliary cirrhosis
- Symptoms and histological features of primary biliary cirrhosis
- Survival rates
- Need for liver transplantation

- Quality of life
- Side effects of medications

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Medline search

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Level A Data derived from multiple randomized clinical trials or meta-analyses

Level B Data derived from a single randomized trial, or nonrandomized studies

Level C Only consensus opinion of experts, case studies, or standard-of-care

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

These guidelines are based on the following: (1) formal review and analysis of the recently published world literature on the topic (Medline search); (2) the American College of Physicians Manual for Assessing Health Practices and Designing Practice Guidelines; (3) guideline policies, including the American Association for the Study of Liver Diseases (AASLD) Policy on the Development and Use of Practice Guidelines and the American Gastroenterological Association Policy Statement on Guidelines; and (4) the experience of the authors in the specified topic.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Grading System for Recommendations

Class I Conditions for which there is evidence and/or general agreement that a given diagnostic evaluation, procedure or treatment is beneficial, useful, and effective

Class II Conditions for which there is conflicting evidence and/or a divergence of opinion about the usefulness/efficacy of a diagnostic evaluation, procedure, or treatment

Class IIa Weight of evidence/opinion is in favor of usefulness/efficacy

Class IIb Usefulness/efficacy is less well established by evidence/opinion

Class III Conditions for which there is evidence and/or general agreement that a diagnostic evaluation, procedure/treatment is not useful/effective and in some cases may be harmful

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

This guideline has been approved by the American Association for the Study of Liver Diseases (AASLD) and represents the position of the association. This guideline was produced in collaboration with the Practice Guidelines Committee of the AASLD which provided extensive peer review of the manuscript.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The grading system for the class of recommendations (I, II, IIa, IIb, III) and the levels of evidence (A–C) are defined at the end of the "Major Recommendations" field.

Diagnosis of Primary Biliary Cirrhosis (PBC)

1. The diagnosis of PBC can be established when two of the following three criteria are met:
    - Biochemical evidence of cholestasis based mainly on alkaline phosphatase elevation.
    - Presence of antimitochondrial antibody (AMA).
    - Histologic evidence of nonsuppurative destructive cholangitis and destruction of interlobular bile ducts **(Class I, Level B)**.

Therapy for Primary Biliary Cirrhosis

2. *Ursodeoxycholic Acid* (UDCA) in a dose of 13 to 15 mg/kg/day orally is recommended for patients with PBC who have abnormal liver enzyme values regardless of histologic stage **(Class I, Level A)**.
3. For patients requiring bile acid sequestrants, UDCA should be given 2 to 4 hours before or after ingestion **(Class I, Level C)**.

Management of Symptoms

Management of Pruritus

4. Bile acid sequestrants should be used as initial therapy for patients with PBC who have pruritus **(Class I, Level B)**.
5. The following agents can be used for pruritus refractory to bile acid sequestrants:
    - Rifampicin 150 to 300 mg twice daily **(Class I, Level A)**.
    - Oral opiate antagonists such as naltrexone 50 mg daily **(Class I, Level A)**.
    - Sertraline (75 to 100 mg daily) can be tried when other measures fail **(Class I, Level B)**.

Management of the Sicca Syndrome

6. Management of dry eyes can include the following:
    - Artificial tears should be used initially **(Class I, Level C)**.
    - Pilocarpine or cevimeline can be used in patients refractory to artificial tears **(Class IIa, Level B)**.
    - Cyclosporine ophthalmic emulsion can be used in those refractory to other agents, preferably under the supervision of an ophthalmologist **(Class I, Level A)**.
7. The following therapies should be used for xerostomia and dysphagia:
    - Saliva substitutes can be tried **(Class I, Level C)**.
    - Pilocarpine or cevimeline can be used if patients remain symptomatic despite saliva substitutes **(Class I, Level B)**.
8. Moisturizers can be given for vaginal dryness **(Class I, Level C)**.

Complications Related to Chronic Cholestasis

Osteopenia/Osteoporosis

9. Patients with PBC should be provided 1000 to 1500 mg of calcium and 1000 international units (IU) of vitamin D daily in the diet and as supplements if needed **(Class I, Level C)**.
10. Alendronate orally, 70 mg weekly, should be considered if patients are osteopenic in the absence of acid reflux or known varices **(Class I, Level A)**.

Definitions:

Levels of Evidence

Level A Data derived from multiple randomized clinical trials or meta-analyses

Level B Data derived from a single randomized trial, or nonrandomized studies

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Grading System for Recommendations

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CLINICAL ALGORITHM(S)

The original guideline document contains clinical algorithms for:

- The diagnosis of primary biliary cirrhosis
- The treatment of primary biliary cirrhosis

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence is specifically stated for each recommendation (see the "Major Recommendations" field).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate diagnosis of and management of primary biliary cirrhosis (PBC)

POTENTIAL HARMS

Side effects of therapy

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

These recommendations suggest preferred approaches to the diagnostic, therapeutic, and preventive aspects of care. They are intended to be flexible, in contrast to standards of care, which are inflexible policies to be followed in every case.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Clinical Algorithm
Personal Digital Assistant (PDA) Downloads

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2000 Apr (revised 2009 Jul)

GUIDELINE DEVELOPER(S)

American Association for the Study of Liver Diseases - Private Nonprofit Research Organization

SOURCE(S) OF FUNDING

American Association for the Study of Liver Diseases

GUIDELINE COMMITTEE

Practice Guidelines Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the American Association for the Study of Liver Diseases Web site.

Print copies: Available from the American Association for the Study of Liver Diseases, 1729 King Street, Suite 200; Alexandria, VA 22314; Phone: 703-299-9766; Web site: www.aasld.org; e-mail: aasld@aasld.org.

AVAILABILITY OF COMPANION DOCUMENTS

This guideline is available as a Personal Digital Assistant (PDA) download via the APPRISOR™ Document Viewer from www.apprisor.com.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on May 9, 2003. The information was verified by the guideline developer as of June 12, 2003. This NGC summary was updated by ECRI Institute on November 5, 2009. The information was verified by the guideline developer on December 16, 2009.

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